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THE HISTORIAN'S VIEW-Reminiscences'

Hiram Hamilton Maxim

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Reminiscent Radio Tales *By Hiram Hamilton Maxim

A Glimpse into the early era of wireless in the United States

Reminiscences of Hiram Percy Maxim's
early days in "wireless telegraphy."

by

Hiram Hamilton Maxim, his son.

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In 1911, when I was a boy of eleven, I had a school mate friend, John Garret, who had made a wireless set with which he could telegraph back and forth with another friend and school mate, Harmon Barber. John Garret lived on the corner of Farmington Avenue and Prospect Avenue in Hartford. I was living with my family at 556 Prospect Avenue. The distance they bridged was three blocks. John had made the sending and receiving set himself from equipment then available. My recollection of the details are understandingly sketchy at this late date (1970) but I do remember the wiring stapled to a board with little pieces of glass inserted where the wires crossed. The wiring consisted entirely of #18 "bell wire", as it was known at the time. The principle, and most spectacular item in the transmitting set was an electrolytic interrupter which fed the spark coil.

I told my father about John's wireless and further told him that he could telegraph back and forth with Harmon Barber. My father, being a little skeptical, suggested that he give John a short message to send to Harmon who would then telephone back the answer. This was done, the correct answer came back at once, and Hiram Percy Maxim was hooked on "radio" from then on for the rest of his life.

I was just as interested. Together we immediately started to get some kind of an outfit ^{to} put out a signal and to receive. He first bought a receiving set from a firm in New York called "Hunt & McCree"

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nothing of the details of this first set except that it had a simple tuning coil and an electrolytic detector. But I do remember that it was very unsatisfactory and would hardly work at all. The transmitter was typical of the time and consisted of nothing more than a small spark coil with a simple spark gap made from two sines from the usual wet batteries, so common at the time for door bells. One side of the spark gap was connected to the antenna and the other to the ground. That's all.

The receiver was so unsatisfactory that something had to be done. My father saw in Harris Parker's toy store at the corner of Main Street and Asylum Street in Hartford a receiving set for sale that looked much more sophisticated than what we had. He bought it and brought it home one evening. We went right at it with great excitement, but couldn't seem to make it work, to our intense disappointment. So, the next day he sadly took it back to Harris Parker's.

The next evening, the door bell rang. My father answered the door and found a rather unusual looking young man with black hair and brilliant, striking, greenish eyes. He said his name was Clarence Tuska, that he had made the set my father had just returned and he had come to find out why my father couldn't make it work. At that moment began a life long association between the two in the radio world that led to the founding of the American Radio Relay League, the C.D. Tuska Radio Company, and a close association with all of us in many ways. I myself became one of his first employees in his Company during summer vacation from M.I.T. From that beginning we continued to get better gear and to learn how to make it work. I was just as fascinated by wireless as he was. We advanced so rapidly that in 1913 he and I, and perhaps Tuska as well,

went to Boston where we took the examination for First Grade Commercial Radio Operator's license and all passed with flying colors. I was only thirteen at the time, which caused some comment.

When we first really got on the air, there were no licensing requirements at all. We chose our own call letters, using whatever seemed appropriate. At first we merely used our initials, he took H P M as his call letters, while I used H M. Then it became the fashion in the Hartford area to have call letters with the prefix of S N. He took S N W and I took S N Y. We used these calls until Federal licensing became established. As best as I can remember our first licensed call letters were I Z N. Then some time later this became I A W, which became famous as the A R R L matured and its fame and membership grew.

As our equipment improved, we were always trying to reach out farther and farther. It occurred to H P M that it would be an interesting idea to see if a Relay League, or something like it, could be organized, by which messages could be relayed from one member to another and thereby cover great distances. He and Tuska got together on this and from their efforts came the American Radio Relay League. This organization went on to become the "voice of Amateur Radio" and published the magazine "QST", which became the outstanding and leading Amateur radio magazine in the country, and it still is.

Odd bits and pieces of memories of some of the gear come in to my mind. He read that in order to put out a strong signal, a very large antenna with immense spread was needed. So he and I built a fifty foot pole for the back yard with a spreader that I recall was about twenty four feet wide with fourteen tinned iron wires strung to another spreader on a

a pole fastened up in a maple tree out near the street. The tree is still there beside the house at 550 Prospect Avenue. I remember when rotary spark gaps became the thing to have. We went through a long period of experiment and development in this field, crowning the whole period with "Old Betsy", the great rotary spark gap that we had after moving to 276 N. Whitney Street, which was the rotary gap to end all rotary gaps. It was (and still is) a fearsome machine, making an appalling noise when operating, but it put out the best signal we ever had in the spark gap days. Then I remember very clearly our first vacuum tube for receiving. It was called an Arnold Audion and was a tremendous improvement over the crystal detectors. It had a quirk in its design, which required that a small candle be burned under it at the right place and distance in order to get the best out of it. The antenna at the Whitney Street house was also enormous. The spark gap was so noisy and required such a large motor to drive it, that all the transmitting gear was installed in the cellar with the operating station in what my mother called "the conservery" just off the living room. The receivers were at the operating station.

It was great fun to operate the station. I kept it up right along with him until I went to M I T. After another year or two, those dreadful things called "girls" intruded into my life, which still further diluted my interest. But I can still copy the code and I'm on the air, in a way, by having a radio telephone in my boat, although this is looked upon with utter contempt by any bonafide radio "ham."

These later years are well chronicled in the records of the Relay League and in "QST". In the early days HPM wrote a series of humorous stories under the pen name of "The Old Man." It was a well kept secret who the author was. In describing the garbled messages he supposedly received, he

coined funny words, which stuck for one reason or another. The most outstanding one was "Wouffhong" which in a devious manner became the secret holy of holies in the League. Not to be outdone, he eventually actually produced the mythical "Wouffhong". I never see it without an uncontrollable desire to laugh, because I was entirely familiar with its origin, knew precisely what it was originally made for, and who made it. It is such a holy and untouchable symbol in the League that I am afraid to let the cat out of the bag, even here, for fear some dedicated "ham" will some day read this. The secret of the "Old Man" was kept inviolate for years. I suppose all League members who aren't too young have learned by now, but it was a mystery for years. He used to give the stories to my mother and me to read for our reactions before he sent them to the boys at the League office.

Most of his old gear is preserved at the League's museum. "Old Betsy" is there, I am told, inoperating condition. After I moved on to other things the art changed very greatly. The big change was from spark sets to "continuous wave" transmission. Instead of using a kilowatt of power to transmit 200 miles, it became possible to work two way communication with places as far away as Japan with only five watts. As the available frequency spectrum became more and more restricted, greater selectivity had to be developed. If "Old Betsy" were to be started up today, she would paralyze every receiver in fifty miles with her broad signal.